

Serial No. 09/889,383

THYES et al.

PF04800001211

A P P E N D I X I:

CLAIM AMENDMENTS:

Cancel Claims 1 and 2 and enter new Claims 3 to 8 as indicated in the following listing of the claims:

1. (canceled)
2. (canceled)
3. (new) A process for reducing the ethyl 3-dimethylamino-2-phenyl-propionate content of a cis/trans mixture of ethyl 2-dimethylamino-1-phenyl-3-cyclohexene-1-carboxylate which is contaminated with said phenylpropionate, which process comprises selectively converting the ethyl 3-dimethylamino-2-phenyl-propionate into ethyl atropate by eliminating dimethyl amine without essentially affecting the cis/trans ratio of the ethyl 2-dimethylamino-1-phenyl-3-cyclohexene-1-carboxylate by providing a solution of the contaminated cis/trans mixture of the ethyl 2-dimethylamino-1-phenyl-3-cyclohexene-1-carboxylate in a water immiscible solvent, adding to said solution a carboxylic acid in amounts of from 0.75 to 2.0 equivalents per mole of the ethyl 2-dimethylamino-1-phenyl-3-cyclohexene-1-carboxylate, and stirring the resulting reaction mixture for 0.5 to 2 hours at a temperature of from 50°C to 100°C.
4. (new) The process of claim 3, wherein the resultant content of 3-dimethylamino-phenyl-propionic acid-ethylester is below 0.10%.
5. (new) The process of claim 3, which further comprises recovering the ethyl 2-dimethylamino-1-phenyl-3-cyclohexene-1-carboxylate by extracting the water immiscible solvent phase at an alkaline pH with water and subsequently concentrating the water immiscible solvent phase.
6. (new) The process of claim 3, which comprises adding to the solution of the contaminated cis/trans mixture of the ethyl 2-dimethylamino-1-phenyl-3-cyclohexene-1-carboxylate in a water immiscible solvent a formic acid and/or acetic acid in amounts of from 0.75 to 2.0 equivalents per mole of the ethyl 2-dimethylamino-1-phenyl-3-cyclohexene-1-carboxylate,

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stirring the resulting mixture for 0.5 to 2 hours at a temperature of from 50°C to 100°C.

7. (new) The process of claim 6, which further comprises recovering the ethyl 2-dimethylamino-1-phenyl-3-cyclohexene-1-carboxylate by extracting the water immiscible solvent phase at an alkaline pH with water and subsequently concentrating the water immiscible solvent phase.
8. (new) The process of claim 6, wherein the resultant content of 3-dimethylamino-phenyl-propionic acid-ethylester is below 0.10%.

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Current Claims 3 to 8:

3. (new) A process for reducing the ethyl 3-dimethylamino-2-phenyl-propionate content of a cis/trans mixture of ethyl 2-dimethylamino-1-phenyl-3-cyclohexene-1-carboxylate which is contaminated with said phenylpropionate, which process comprises selectively converting the ethyl 3-dimethylamino-2-phenyl-propionate into ethyl atropate by eliminating dimethyl amine without essentially affecting the cis/trans ratio of the ethyl 2-dimethylamino-1-phenyl-3-cyclohexene-1-carboxylate by providing a solution of the contaminated cis/trans mixture of the ethyl 2-dimethylamino-1-phenyl-3-cyclohexene-1-carboxylate in a water immiscible solvent, adding to said solution a carboxylic acid in amounts of from 0.75 to 2.0 equivalents per mole of the ethyl 2-dimethylamino-1-phenyl-3-cyclohexene-1-carboxylate, and stirring the resulting reaction mixture for 0.5 to 2 hours at a temperature of from 50°C to 100°C.
4. (new) The process of claim 3, wherein the resultant content of 3-dimethylamino-phenyl-propionic acid-ethylester is below 0.10%.
5. (new) The process of claim 3, which further comprises recovering the ethyl 2-dimethylamino-1-phenyl-3-cyclohexene-1-carboxylate by extracting the water immiscible solvent phase at an alkaline pH with water and subsequently concentrating the water immiscible solvent phase.
6. (new) The process of claim 3, which comprises adding to the solution of the contaminated cis/trans mixture of the ethyl 2-dimethylamino-1-phenyl-3-cyclohexene-1-carboxylate in a water immiscible solvent a formic acid and/or acetic acid in amounts of from 0.75 to 2.0 equivalents per mole of the ethyl 2-dimethylamino-1-phenyl-3-cyclohexene-1-carboxylate, stirring the resulting mixture for 0.5 to 2 hours at a temperature of from 50°C to 100°C.
7. (new) The process of claim 6, which further comprises recovering the ethyl 2-dimethylamino-1-phenyl-3-cyclohexene-1-carboxylate by extracting the water immiscible solvent phase at an alkaline pH with water and subsequently concentrating the water immiscible solvent phase.
8. (new) The process of claim 6, wherein the resultant content of 3-dimethylamino-phenyl-propionic acid-ethylester is below 0.10%.

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